

IN THE CLAIMS:

1. (Currently Amended) An apparatus for assembling tires and wheels with respect to one another comprising:

a plurality of modules removably interconnected with one another to form an assembly line with at least one of said modules being configured to perform an operation different than other of said modules; and

an endless conveyor member for moving wheels along said assembly line and supported for circling movement along said length by said plurality of modules.

2. (Original) The apparatus of claim 1 wherein said plurality of modules are identical with respect to one another.

3. (Original) The apparatus of claim 1 wherein each of said plurality of modules is exchangeable with any other of said plurality of modules.

4. (Original) The apparatus of claim 1 wherein each of said plurality of modules includes an upper frame assembly and a lower frame assembly.

5. (Currently Amended) The apparatus of claim 4 wherein [[the]] said upper frame assembly is mounted on said lower frame assembly.

6. (Currently Amended) The apparatus of claim 4 further comprising:
a plurality of carriages moveable along said plurality of modules with said endless conveyor member, wherein each of said plurality of modules includes first and second aligning tracks associated with said upper frame assembly for guiding movement of said carriages through said plurality of modules in a first direction.

7. (Original) The apparatus of claim 6 wherein each of said plurality of modules further comprises supporting mechanisms for supporting movement of said carriages through said plurality of modules in a second direction.

8. (Currently Amended) An apparatus for assembling tires and wheel with respect to one another comprising:
a plurality of modules and workstations removably interconnected with one another to form an assembly line ~~[[;]]~~ with a plurality of said workstations dispersed between said modules for assembling the tires to the wheels; and
a continuous conveyor member for moving the wheels and the tires along said assembly line, wherein said continuous conveyor member defines a closed loop resting upon at least said modules while transporting the tires in a first direction and supported by said modules while moving in a return direction.

9. (Currently Amended) The apparatus of claim 8 wherein said ~~endless~~ continuous conveyor member is a chain.

10. (Currently Amended) The apparatus of claim 8 wherein said plurality of workstations include a tire soaping station, a wheel soaping station and a wheel assembly workstation for assembling individual [[said]] the soaped tires and individual [[said]] the soaped wheels with respect to one another.

11. (Currently Amended) The apparatus of claim 8 wherein said plurality of workstations include at least two wheel assembly workstations for assembling individual [[said]] the soaped tires and individual [[said]] the soaped wheels with respect to one another.

12. (Currently Amended) The apparatus of claim 8 further comprising:
a plurality of carriages moveable along said plurality of modules with said continuous conveyor member, wherein each of said plurality of modules includes first and second aligning tracks associated with said upper frame assembly for guiding movement of said carriages through said plurality of modules in a first direction.

13. (Original) The apparatus of claim 12 wherein each of said plurality of modules further comprises supporting mechanisms for supporting movement of said carriages through said plurality of modules in a second direction.

14. (Currently Amended) An apparatus for assembling tires and wheel with respect to one another comprising:

a plurality of modules removably interconnected with one another to form an assembly line;

an endless conveyor member for moving wheels along said assembly line and supported for circling movement along said length by said plurality of modules;

a wheel soaper workstation for soaping wheels moved along said assembly line by said endless conveyor member and disposed along said assembly line adjacent a first module of said plurality of modules;

a tire soaper workstation for soaping tires to be moved to said endless conveyor member and disposed along said assembly line adjacent a second module of said plurality of modules;

a transfer device for receiving soaped tires from said tire soaper workstation and transferring said soaped tires to said endless conveyor member downstream of said wheel soaper and disposed along said assembly line adjacent a third module of said plurality of modules;

a wheel assembly workstation for assembling individual said soaped tires and individual said soaped wheels with respect to one another, said wheel assembly workstation disposed along said assembly line adjacent a fourth module of said plurality of modules, downstream of said wheel soaper workstation and said transfer device; and

a tire inflation workstation disposed along said assembly line adjacent a fifth module of said plurality of modules, downstream of said wheel assembly workstation; and

said plurality of modules and workstations being removably interconnected with one another to form said assembly line with said workstations being dispersed between said

Applicant: Pellerin et al.
Serial No. 10/593,921

modules for assembling the tires to the wheels.